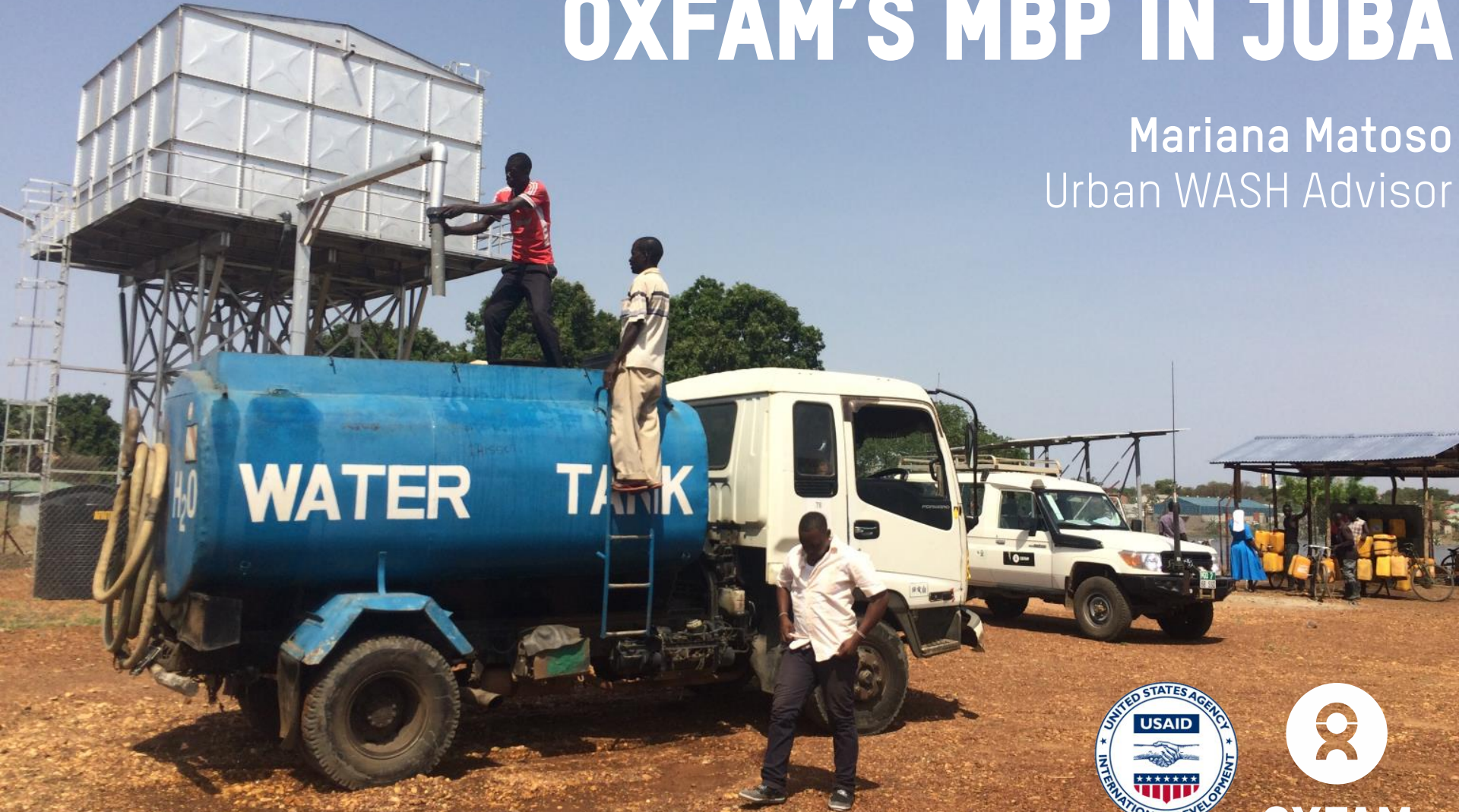


LESSONS LEARNED FROM OXFAM'S MBP IN JUBA

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Urban WASH Advisor



21 March 2018



OXFAM

OUTLINE

- **WASH Market Based Programming**
 1. Why WASH MBP in Juba?

- **WASH Market Based Modalities in Juba**
 1. Private Sector Micro-Grant Scheme
 2. Professionalising community-led water supply systems

- **WASH MPB in Juba**
 1. Lessons Learned
 2. Moving Forward

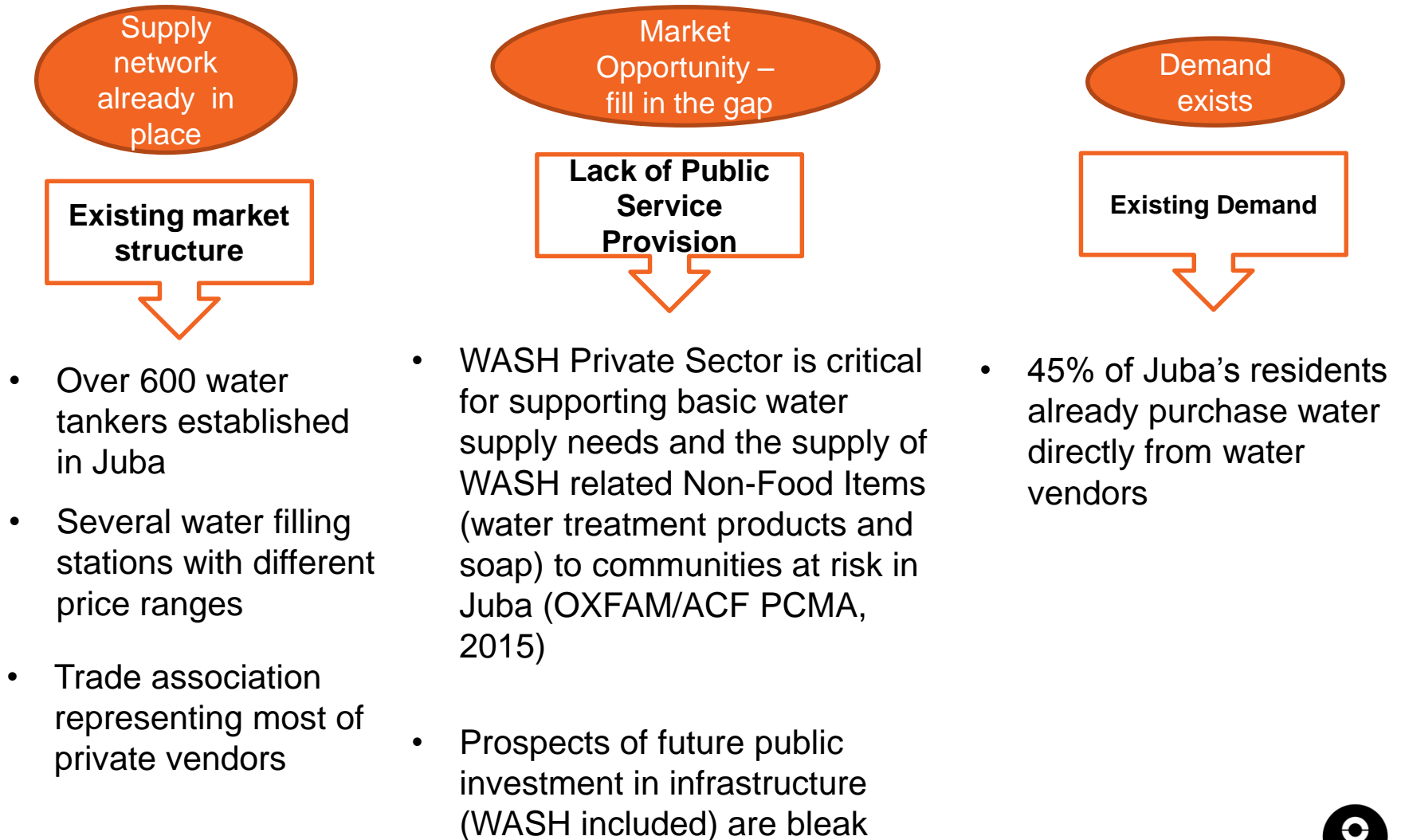


WASH MARKET-BASED PROGRAMMING (MBP)



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WHY WASH (WATER) MBP IN JUBA?





WHY WASH MBP IN JUBA?

Water Market is still imperfect:

1. Protracted crisis context;
2. Guiding policies exist but legal gaps remain;
3. lack of service regulation;
4. lack of water quality monitoring;
5. lack of oversight & accountability systems;
6. hyperinflation;
7. irregular fuel availability



- Drinking water has become a premium commodity
- People are resorting to consuming untreated water from surface water;
- People are unable to afford household water treatment products

WASH MARKET-BASED PROGRAMMING IN JUBA, South Sudan

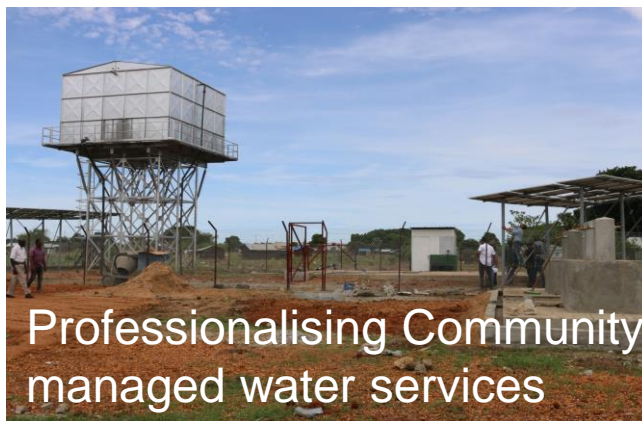


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WASH MBP MODALITIES IN JUBA



Private Sector Micro-Grant (PSMG) Initiative



Professionalising Community managed water services

	Description	General example	Water Supply example
Short Term	Provision of basic needs assistance to crisis-affected people that is delivered through local market systems	Local and regional procurement for in-kind distributions Cash and vouchers Cash for work	Provision of water vouchers; contracting local water truckers to deliver water
Short Term	Temporary interventions to help restore market functioning, often directly targeting market actors	Targeted support to market actors (grants, loans, transport subsidies, temporary storage) Some types of cash for work (e.g., restoration of major supply routes)	Cash or vouchers to support water providers with transport and storage; cash grants to support initial water treatment by producers and vendors; payment of water costs (water trucking, kiosks, municipal water fees etc.); technical and in-kind support for infrastructure repair; distribution of communal water storage
Long Term	Interventions that address observed gaps and/or weaknesses in market systems in order to improve and/or expand their resilience and ability to support livelihoods	Employment creation / enterprise development Increasing scope of and access to financial services Development of supply and value chains Developing productive assets	Training water vendors on appropriate water treatment; advocacy for improved regulation of the water market; support to O&M of infrastructure; technical support on water governance, regulation and revenue collection;



PSMG (Private Sector Micro-Grant) Initiative



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PSMG INITIATIVE

A micro-grant scheme that responds to water tanker challenges in view of improving service delivery to the poorest and most vulnerable households in Khor William.



Funding mechanism that provides direct operational support to the water tankers business and contributes to improving the enabling environment.

	Modality #1 Spare Parts for Water	Modality #2 Fuel for Water	Modality #3 Clean Water Vouchers
DISBURSEMENT MODALITY	Cash Grant	Commodity Voucher	Commodity Voucher
PROBLEM IT ADDRESSES	Costs of Spare Parts	Irregular supply of Fuel	Provision of Poor Quality Water
MARKET ENGAGEMENT TYPE	Supporting Markets	Supporting Markets	Using Markets
TARGET GROUP	Water Tankers	Water Tankers	Water Filling/Treatment Stations
DESCRIPTION	<p>Water tankers receive a cash grant that can be redeemed at one of Oxfam's recognised garages (advised by the Private Water Tankers).</p> <p>This grant covers the cost of a full MOT and pays for the replacement of key parts. Water Tankers must disclose an MOT and cost of spare parts invoice ahead of receiving this grant.</p> <p>Oxfam will pay directly to the garage.</p>	<p>Water tankers receive Commodity Fuel Voucher at a subsidised cost.</p> <p>A specific amount of fuel will be collected directly from Oxfam. Amount will be determined considering the distance between Oxfam (fuel supplier) – Water Filling Station (water supplier) and HH in Khor William.</p>	<p>This modality entails distributing Commodity Water Vouchers to Water Filling/Treatment Stations across Lologo, to be exchanged for potable, clean water at a subsidized rate.</p> <p>It involves pre-printing cash vouchers that are distributed to Oxfam Certified Water Production Stations (in Lologo), which are then redeemed with preselected water tankers (operating in Khor William) for a specified quantity of water.</p> <p>Cash transfer payments are then made to the commercial suppliers against the submitted vouchers.</p>

**Chosen
modality**

PROFESSIONALISING COMMUNITY- LED WATER SUPPLY SYSTEMS



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GUMBO WATER TREATMENT PLANT



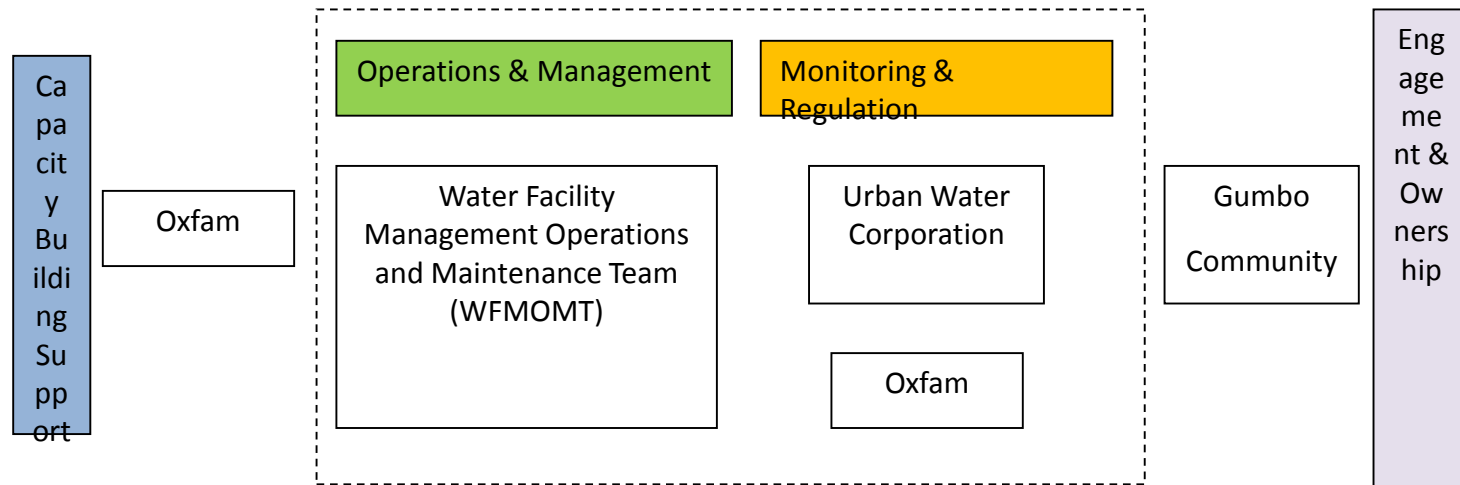
GUMBO WTP – ONE OF ITS KIND

- It is **solar powered**, a technology not yet widely applied in the sector, which exponentially decreases the dependency levels of increasingly expensive consumables such as diesel and oil – one of the main key issues linked with water price increase in Juba
- It is **multi-purpose**, whereby it has been designed to simultaneously sell clean and potable water to a varied range of users/clients, such as water tankers, water bicycle vendors and households, thus ensuring that benefits cascade well-beyond the premises' radius and cascade through the water market chain
- It holds **the potential to be transformational for the Gumbo community**, as it represents a significant business operation. Not only has it been handed over to the community at 'zero-cost', but savings from using solar energy coupled with high revenue from different water vending sources indicate that profit levels might be high



PROFESSIONALISING GUMBO OPERATOR

Gumbo was designed to be **fully owned, operated and managed by the Community through a voluntary Community-led Water Users' Committee**



PROFESSIONALISING COMMUNITY-BASED SERVICE DELIVERY

Hybrid Management → Paradigm shift:

Move away from voluntary provision of community-based water services towards a philosophy of service provision. This model is set up to strengthen service providers to implement performance-based management and adopt good business practices; whilst working towards agreed standards and levels of service to consumers.

Gumbo Community, through their elected representatives in **Gumbo Water Cooperative Society**, retains the ultimate management and decision-making power but chooses to delegate specific tasks linked to the operation and administration of the WTP system to individual entrepreneurs or small local businesses



PROFESSIONALISING GUMBO OPERATOR

Moving beyond traditional community management →
Professionalising Community Organisations
(robust and professionalized approach to service delivery)

Gumbo Water
Management
Committee



**Gumbo Water Cooperative
Society**



- Takes into consideration Gumbo's structures and arrangements
- Draws inspiration from the current draft Water Bill (2014)
- Provides additional accountability structures





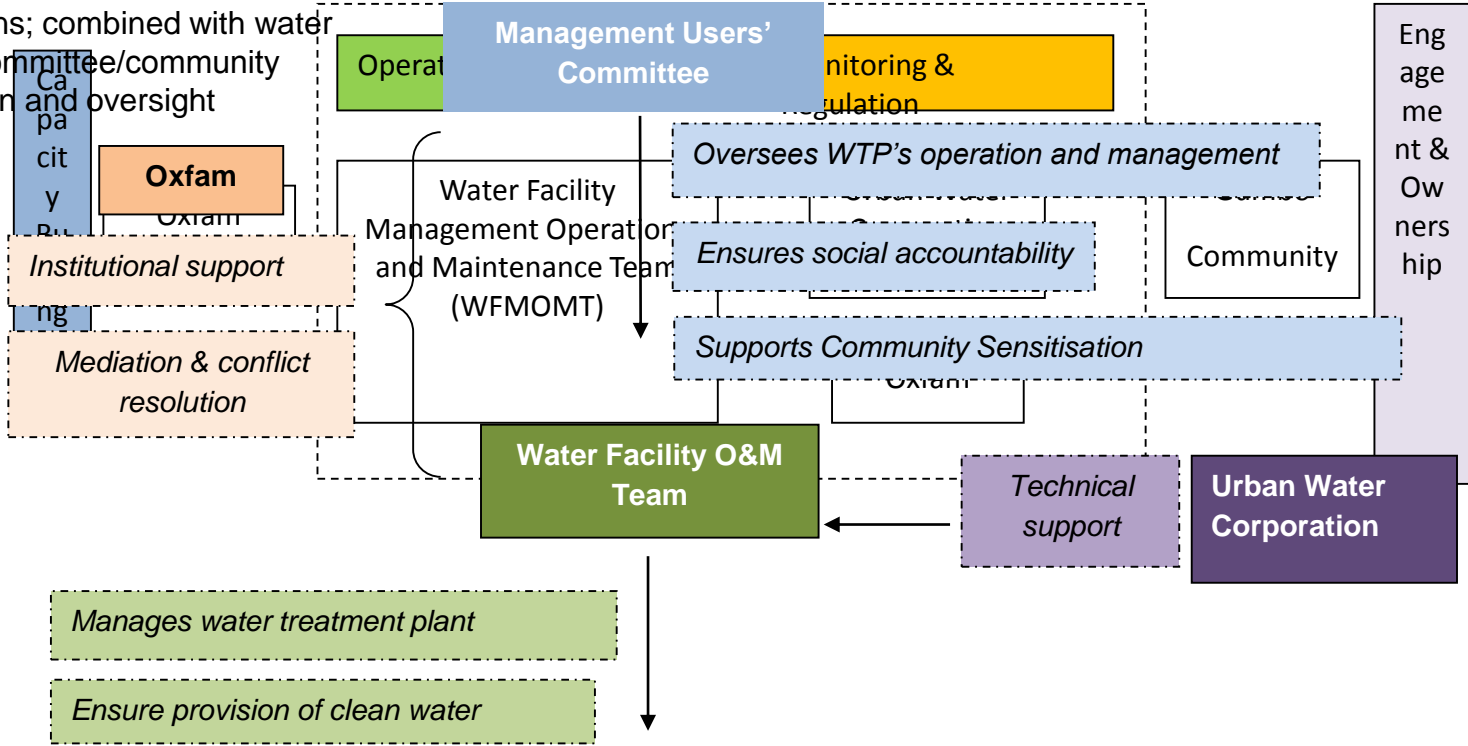
Community

Gumbo Water Cooperative Society

Local Government Authority (RP)

Contracting-out the management of Gumbo WTP to a small-scale operator or user-appointed representatives experienced in running water-related business operations; combined with water users' committee/community regulation and oversight

Ensures GCOSWO is compliant & taxes and regulations



PROFESSIONALISING GUMBO CBO

Step 1: Business Plan Development

STEP 1: Providing direct support to the Community-based Operating Entity by developing a business implementation plan (BIP) – Roadmap to both Oxfam Staff & CBO

Core Dimension	Key Information
<i>WASH Sector Enabling Environment</i>	Provided in-depth understanding of South Sudan's Urban WASH legal and institutional framework, to ensure that operational, management, accountability and contingency plans were in line with national policies and programs; whilst responding to and operating within key institutions.
<i>Technical Feasibility</i>	Described the infrastructure layout of the water treatment plant and suggested technical improvements needed in the medium- to long-term, to ensure the long-term sustainability of the infrastructure, as well as staff well-being and staff retention.
<i>Commercial Viability</i>	It depicted the profile of users likely to purchase water, their patterns of consumption, their purchase power, their service expectations and willingness to pay; as well as a life-cycle cost analysis. It also provided suggestions on the kind of arrangements for collection of service charges/tariffs.
<i>Management Arrangements</i>	Described initial management arrangements and provided suggestions on what the best fitting alternative management set-up would be, considering existing social structures as well operational and maintenance (O&M) needs, accountability and contingency planning.
<i>Local Accountability Mechanisms</i>	Provided recommendations on mechanisms that the Community-based Operating Entity would need to have in place, as per sectors' institutional and legal framework.
<i>Contingency Planning</i>	Provided tools and processes on how to maintain viable strategies that allow for the continuity of services in the wake of an event that poses an unacceptable risk of business and/or operational disruption to Gumbo WTP.





Table 1 – Gumbo WTP: Operations and Minor Maintenance Expenditure (Monthly basis)

OPERATIONS & MINOR MAINTENANCE EXPENDITURE	Unit	Quantity	Rate (SSP)	Frequency	Cost (SSP)	Cost (USD)
SALARIES						
WTP Manager	Per pp/month	1	30000.00	1	30000.00	\$ 560
WTP Supervisor	Per pp/month	1	15000.00	1	15000.00	\$ 200
WTP Assistant 1 (tap stand - households)	Per pp/month	1	8000.00	1	8000.00	\$ 53
WTP Assistant 2 (tap stand - bicycle vendors)	Per pp/month	1	8000.00	1	8000.00	\$ 53
WTP Assistant 3 (tanker filling station)	Per pp/month	1	8000.00	1	8000.00	\$ 53
Guard (Armed security - Inc. Food and monthly incentive)	Per pp/month	2	4500.00	1	9000.00	\$ 60
Incentives for Water Management Committee	Per pp/month	6	1000.00	1	6000.00	\$ 40
OPERATIONS					21000.00	\$ 87
Office supplies	Per month	1	1000.00	1	1000.00	\$ 7
Communications	Per month	1	4500.00	1	4500.00	\$ 30
Transportation (technician, supervisor, manager)	Per month	1	7500.00	1	7500.00	\$ 50
Desludging Pump Rental (2x a year for 2 days) [YEARLY cost]*	Rental days	2	12000.00	4	8000.00	\$ 53
CONSUMABLES					2606750.00	\$ 203
Chlorine (powder)	Kg/per day	1.5	616.67	30	27750.00	\$ 185
Aluminium Sulphate (Coagulant)	Kg/per day	9	120.00	30	2700.00	\$ 18
WATER QUALITY MONITORING					1545.25	\$ 10
FRC and pH (daily) - at source level (DPD1 & Phenol Red)	Per day	2	3.24	30	194.16	\$ 1
FRC and pH (biweekly) - 10 x2 household x 4 tablets a month x every other week (DPD1 & Phenol Red)	Every two weeks	2	3.24	160	517.76	\$ 3
Chemical (selected parameters) 6 month interval (LAB) **	Every 6 months	1	5000.00	2	4833.33	\$ 5.56
IN STOCK FOR MINOR REPLACEMENT/CONTINGENCY*					14591.67	\$ 97
Consumables for 2 months	Per month	1	38450.00	1	3204.17	\$ 21
Galvanised Steel pipes 3"	Metres	4	35400.00	1	2950.00	\$ 20
Assessories	Assorted	1	22500.00	1	1875.00	\$ 13
Installation & Commissioning (Labour)	No	1	52500.00	1	4375.00	\$ 29
Maram	Trips	16	26250.00	1	2187.50	\$ 15
TOTAL OPERATION & MINOR MAINTENANCE EXPENDITURE						\$ 957

*Yearly cost diluted in monthly expenditure

Source: Business Implementation Plan – Gumbo Water Treatment Plant (2017)

Table 2 – Gumbo WTP: Capital Maintenance (Major Replacements)

Component	Quantity	Year of construction	Total Cost (USD)	Replacement Freq.	2017	2018	2019	2020
Intake Pump - GRUNDFOS DWK 80.22 pumps	1	2017	\$ 2,000.00	10	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00
Drainage pump - Booster Pump GRUNDFOS DWK 80.22 pump	1	2017	\$ 2,000.00	10	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00
Distribution Fittings	1	2017	\$ 2,145.00	10	\$ 214.50	\$ 214.50	\$ 214.50	\$ 214.50
Elevated Water Storage Tank	1	2017	\$ 4,020.00	10	\$ 402.00	\$ 402.00	\$ 402.00	\$ 402.00
Photovoltaic solar modules YINGLI SOLAR SW250	38	2017	\$ 11,400.00	20	\$ 570.00	\$ 570.00	\$ 570.00	\$ 570.00
AC solar pump controller (inverter) LORENZ PSK2-7.5.KVA	2	2017	\$ 5,000.00	20	\$ 250.00	\$ 250.00	\$ 250.00	\$ 250.00
				TOTAL PER ANNUM	\$ 1,836.50	\$ 1,836.50	\$ 1,836.50	\$ 1,836.50
				TOTAL PER MONTH	\$ 153.04	\$ 153.04	\$ 153.04	\$ 153.04

Source: Business Implementation Plan – Gumbo Water Treatment Plant (2017)

Table 3 – Tariff Structure

Revenue Sources per Month (30 days)	Unit	Rate (SSP)	Quantity	Revenue(SSP)	Revenue (USD)
USER TYPE 1: HOUSEHOLDS				34200	\$ 228
3 x Jerry cans per household/per day over a month	76	5	6840	34200	\$ 228
USER TYPE 2: BICYCLE VENDORS				36000	\$ 240
80 x Jerry Cans per bicycle vendor per day over a month	30	0.5	72000	36000	\$ 240
USER TYPE 3: WATER TANKERS				105840	\$ 706
Daily water needs for Tankers/Cubic litres over a month	230	15	6900	103500	\$ 690
Filling Station entry fee per tanker/per day over a month	13	6	390	2340	\$ 16
TOTAL per month				176040	\$ 1,174

Source: Business Implementation Plan – Gumbo Water Treatment Plant (2017)

Table 4 – Projected Cashflow (Jan-April'18)

Revenue & Expenditure per Month (Jan-Apr 2018)	January		February		March		April	
REVENUE (A)	SSP	USD	SSP	USD	SSP	USD	SSP	USD
USER TYPE 1: HOUSEHOLDS	34200	\$ 228	3420	\$ 23	3420	\$ 23	3420	\$ 23
USER TYPE 2: BICYCLE VENDORS	36000	\$ 240	72000	\$ 480	72000	\$ 480	72000	\$ 480
USER TYPE 3: WATER TANKERS	105840	\$ 706	105840	\$ 706	105840	\$ 706	105840	\$ 706
Monthly Surplus (C)	0	\$ -	9497	\$ 63	31047	\$ 207	52597	\$ 351
TOTAL	176040	\$ 1,174	190757	\$ 1,272	212307	\$ 1,415	233857	\$ 1,559
EXPENDITURE (B)								
Operations & Minor Maintenance	136754	\$ 957	136754	\$ 912	136754	\$ 912	136754	\$ 912
Capital Maintenance (Major Replacements)	22956	\$ 153	22956	\$ 153	22956	\$ 153	22956.25	\$ 153
TOTAL	159710	\$ 1110	159710	\$ 1065	159710	\$ 1065	159710	\$ 1065
MONTHLY SURPLUS (A-B = C)	16330	\$ 63	31047	\$ 207	52597	\$ 351	74147	\$ 494

Source: Business Implementation Plan – Gumbo Water Treatment Plant (2017)



PROFESSIONALISING GUMBO CBO

Step 2: Institutional & Operational Support

Providing ongoing institutional support and capacity building throughout the transition of management models and the first months of operation

	Package	Oxfam's Role
#1	Organisational Support	<ul style="list-style-type: none"> • Supporting Governance Transition/Management Arrangements • Support setting up performance monitoring tools • Support setting up accountability tools and processes • Support setting up financial procedures • Supporting pro-poor tariff setting structure based on commercial viability and sustainability
#2	Operational Support	<ul style="list-style-type: none"> • Ensuring onsite O&M training and supervision through a qualified Oxfam Water Technician for the first two months of operations • Provision of subsidised consumables (aluminium sulphate and chlorine) for the first year of operations • Payment of Incentives to Water User Committee and Salaries to O&M Team during the first two months of operations • Improvements to the Water Treatment Plant that ensure security of the facility, staff health and safety and promote income generation • Development of a Contingency Plan • Daily onsite presence to monitor water quality standards
#3	Organisational Training	<ul style="list-style-type: none"> • Management Arrangements, roles and responsibilities • Conflict Mediation • Tariff Setting • Water Quality Monitoring • Financial procedures • Operation and maintenance of a water treatment plant

Oxfam Policy and Practice Series

Forthcoming

**PROFESSIONALISING
COMMUNITY-LED
WATER SUPPLY
SYSTEMS IN JUBA**

Towards Sustaining Service Delivery in
Protracted Crisis

MARIANA MATOSO
URBAN WASH TECHNICAL ADVISOR
OXFAM IN SOUTH SUDAN

This report depicts Oxfam South Sudan experience with a Water Treatment Plant Community Operator and contributes to the debate on the role that communities can play in the process of managing water supply systems amidst protracted crisis. It provides guidance on how to support professionalisation of community services by developing a business plan and calls for donors and implementing agencies to develop WASH programmes that consider medium-term institutional support that ensures sustainability and pro-poor accessibility.

WASH MBP IN JUBA – LESSONS LEARNED



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LESSONS LEARNED

WASH Market Based Approach...

- [+] Supports linkages between Relief, Rehabilitation and Development (LRRD) and more sustainable humanitarian interventions in the context of SS protracted crisis = resonates w/ donors
- [+] Responds to communities' eagerness for longer term solutions that address chronic issues such as dilapidated infrastructure, lack of investment and fair pricing.
- [+] Supported market strengthening and development

However from an implementing agency point of view..

LESSONS LEARNED

WASH Market Based Approach...

[-] It is a resource intensive approach. It requires:

Time: to conduct thorough market research that helps understand the market value chain, gaps, opportunities, challenges and potential; that helps depict the governance framework, power dynamics, how to develop institutional relationships, convince market actors of value and relevance, etc

Expert knowledge: it requires staff equipped with knowledge on WASH software components – institutional frameworks, governance settings, management arrangements, understanding on how markets function, capacity to relate with institutions and private agents, business-mind like



MOVING FORWARD

Improve the way we do programming

1. Incorporate *software* components into WASH infrastructure projects that directly or indirectly support existing WASH market actors;
2. Develop proposals that contemplate providing substantially more regular and structured support that goes beyond the initial system infrastructure, and involves ad hoc technical assistance and institutional support;
3. Incorporate some level of cross-subsidies that ensures sustained and ongoing pro-poor service delivery. Considering the nature of protracted crisis, the likelihood of systems remaining operational at all times is low.





SHUKRAAN!



OXFAM